

Second Specimen.—Breadth or thickness at the pectorals about ten and a half times in the entire length. Depth at that point less than the breadth. Canine teeth in the lower jaw smaller than those above, and not set at such regular intervals as in the first specimen.* Scarcely any appearance of denticulations on the membranous border of the preopercle. Distance between the two dorsals a little less than the length of the first. Pectorals contained eight and a half times in the entire length. Fin-ray formula as follows:—

D. 9—32; A. 42; C. 15, &c.; P. 17; V. 1/5.

Length 14 inches.

In all other respects exactly similar to the specimen first described.

Habitat, coast of Northern Patagonia, and Maldonado.

Mr. Darwin's collection contains two specimens of this fish, which was first discovered by MM. Quoy and Gaimard at Rio Janeiro. The larger one was caught by hook and line in fourteen fathoms water on the coast of Patagonia, in lat. 38° 20'. The second was taken at Maldonado, where he states it to be common. They differ in several respects from the description and figure in the "Histoire des Poissons," of Cuvier and Valenciennes; but as they also differ a little from each other, the species is perhaps subject to variation. Amongst other points, I may mention the scales on the jaws, which are expressly stated by Cuvier to be *without* scales; and also the emargination of the membrane between the rays of the second dorsal and anal, which is not represented in his figure, nor alluded to in his description, though very striking. This last character appears, however, in the figure given in the Zoological Atlas of Freycinet's voyage, which is on the whole a more correct representation. "When cooked, was good eating."—D.

FAMILY.—MULLIDÆ.

1. UPENEUS FLAVOLINEATUS. *Cuv. et Val.*

Upeneus flavolineatus, *Cuv. et Val.* Hist. des Poiss. tom. iii. p. 336.

FORM.—Considerably elongated. Greatest depth contained five times in the entire length, caudal excluded. Head three and a half times in the same. Dorsal line nearly straight. Profile very convex. Crown between the eyes broad and somewhat depressed, forming a slight hollow.

* Probably these teeth are liable to be lost or broken off, so as seldom to occur in exactly the same number and mode of arrangement in two individuals.

Eyes large; their diameter more than one-fourth that of the head. Suborbitals marked on their surface near the lower margin with six or eight diverging salient lines, each terminating at bottom in a mucous pore. Teeth forming a narrow velutine band, hardly visible to the naked eye, but sensible to the touch: none on the vomer or palatines. Opercle with one short flat spine projecting beyond the posterior margin rather more than half a line. Barbules reaching to a little beyond the angle of the preopercle. Mucous tubes of the lateral line with five or six branches; the branches not always simple,* but consisting sometimes of two or three main ones which are subdivided. First dorsal of a triangular form, with the spines rather slender; the first two equalling more than three-fourths of the depth of the body. Space between the dorsals about equalling the length of the first. Second dorsal with the first ray (or spine) scarcely more than half the length of the second, which is longest; the third and succeeding rays gradually decreasing to the last, which is shortest. Length of the second dorsal just equalling its greatest height. Anal answering to this last fin. Caudal deeply forked; the central rays not being one-fourth the length of the outermost ones. Ventrals and pectorals exactly of the same length; both reaching to a vertical line from the extremity of the first dorsal. Vent in a line with the commencement of the second dorsal.

D. 7—1/3; A. 1/6; C. 15, &c.; P. 16; V. 1/5.

Length 6 inches 9 lines.

COLOUR.—"Dull silvery, with a yellow stripe on the side."—D.

There can be but little doubt of this species being the *U. flavolineatus*, which appears to have a wide range over the Indian Ocean, and also to occur in the South Pacific. Mr. Darwin's specimen was taken at the Keeling Islands.

2. UPENEUS TRIFASCIATUS. *Cuv. et Val.*

Upeneus trifasciatus, *Cuv. et Val.* Hist. des Poiss. tom. iii. p. 344.

FORM.—General form resembling that of the *Mullus Surmuletus*, but the snout more elongated. Greatest depth contained about four times and a half in the entire length. Head exactly one-fourth of the same. Eyes small, distant three diameters from the end of the snout. Suborbitals with a moderate number of pores on their disk, but without any salient lines. Posterior extremity of the maxillary broad. A single row of conical teeth in each jaw, very uniform in size, not very large or very close; about twenty-two above and twenty below. Spine of the opercle about a line in length. Barbules reaching to, or a little beyond, the posterior margin of the opercle. Lateral line not much ramified. Height of the first dorsal equalling more than half the depth. Space between the two dorsals equalling one-third the length of the second dorsal.

* As stated by Cuvier and Valenciennes.

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